## Architects Find Energy Efficiency Just a Click Away

*Softdesk Energy is a quick and easy software tool, enabling architects to immediately factor energy efficiency into building designs.*

**RICHLAND, Wash., May 15, 1995 -- Energy efficiency literally has been placed at the fingertips of architects nationwide thanks to a new software design system that automatically incorporates energy-saving features into computer-based designs. Called Softdesk Energy, the program integrates specialized software, computer-aided design drafting tools and commonly used manual techniques for estimating energy use. The result is a one-of-a-kind system that provides immediate feedback on a building's energy consumption during the design process.**

**For the first time, designers simply click a mouse to determine the energy load impacts for every wall, window, awning, door and other exterior components incorporated into their design. The system also determines energy use impacts from internal factors such as lighting needs, temperature, humidity, ventilation, and building usage. All estimates are based on energy estimation techniques published by the American Society of Heating, Refrigerating and Air-Conditioning Engineers, commonly used in industry.**

**Softdesk Energy is the result of a long-running, unique collaboration between three organizations. The U.S. Department of Energy's Pacific Northwest Laboratory (PNL) contributed software development, buildings and energy expertise; the University of Oregon, Eugene, provided architectural design expertise and guided the user interface design; and Softdesk Inc. provided the link to existing design software and end users.**

**Softdesk Inc. is scheduled to release Softdesk Energy in late May,**

making it available to all architects and engineers who use AutoCADþ with Softdesk Auto-Architectþ -- a distribution currently estimated at more than 20,000 users worldwide. Softdesk is the largest developer of building design software used with AutoCADþ.

"Previously, few designers even tried to address energy efficiency because they had to wade through stacks of data to calculate energy loads, resulting in increased design time and costs," said Dave Chassin, lead developer at PNL. "Softdesk Energy is quick and requires little input from the architect, which will significantly reduce these costs and free up the architect's time to explore energy-efficient designs," Chassin added.

Currently, there is a growing demand for energy-efficient designs as a result of the Energy Policy Act of 1992. Softdesk Energy was designed to be quick, easy to use and unobtrusive, enabling designers to meet this market need without interrupting the design process.

Softdesk Energy offers several advantages over other software options -- it is easy to install and fits on just one or two floppy disks. It can be accessed almost immediately, providing results even if the exterior is the only part of the building that is schematically defined.

Softdesk Energy also is unique because design options are presented graphically or in familiar architectural terminology, rather than numerically. For example, to consider climate impacts such as humidity and temperature, the user graphically selects the geographical area from a map. Or, lighting levels can be specified by identifying the type of activity performed in the space. Information outputs also are graphics-based. A building's heating and cooling loads can be displayed to represent a specific day, week, or month.

**Softdesk Energy plays a key role early in the design process when decisions have the greatest impact on energy savings. Often, architects are unable to accurately specify building materials, building use or other details during early design so predicting energy consumption is difficult. Softdesk Energy addresses this problem by automatically applying assumptions based on previous designs until the architect can provide specifics. For example, if an architect draws only the exterior of a commercial building, the software will use knowledge of the building type to supplement the design with ventilation rates, internal energy loads, and insulation R-values.**

**The system is designed and equipped to incorporate other energy design tools, such as code and standards compliance tools, lighting design tools, detailed energy analysis packages and heating, ventilation and air- conditioning equipment selection tools.**

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